

TRANSCRIPT: **Virtual Reality for Serious Illness: Connecting, Healing, and Inducing Awe | Part Two**

Cyberdelic VR And Skeptics

Jeff Haffner / Producer 0:00

Welcome to TCN Talks, and Anatomy of Leadership. We continue our conversation with Kathleen Benton and Terry Yarbrow in part two of Virtual Reality for Serious Illness, Connecting, Healing, and Inducing Awe. And now, here's Chris Comeaux.

Chris Comeaux 0:22

Um, let's talk about the evidence because there might be a couple of, you know, kind of skeptics.

Teri Yarbrow 0:26

I had to, I just have to jump in and say a couple of things about what you're saying about psilocybin. Yes. And that is that there's a lot of research or the beginning of research about the fact that your brain in a deep immersion in VR is the same as your brain when you're on psilocybin. It's not quite ketamine, but I'm I'm a proponent that we, you know, if you're having a bad trip, you can take your headset off. Not the same if you're microdosing under supervision. You got to wait till it's over. So I'm really I'm excited about the idea that a lot of VR is called um technodelic or cyberdelic because it has the same qualities of some of these psychedelics without some of the negative um side effects.

Chris Comeaux 1:16

You know, that's actually a really cool framing, Teri, because I was kind of wondering if virtual reality is the best term to take this into the future. Um it might take something a little bit sexier of what how you just to move people's thinking because it's so rooted in gaming. And again, the first time Kathleen said it, I'm like, what? Um, but I think a framing like that might be a brilliant way. Well, well, let's go to the next segment and let's talk about the evidence because I do think there'll be some people like, okay, well, what is the evidence saying? So, what evidence are you guys seeing with the immersive experiences? Pain, anxiety, distress. I know Kathleen well enough to know that she she wants what's the data say? And so I'm curious, what does the data say?

Spiritual Meaning And Awe Effects

Kathleen Benton 1:58

Yeah, so and it's a great question because it is important that we get a little serious about this and explain this is not fluff, this is not just beautiful, this is not just an added extra. What folks are doing with this across the world is very real. And the data behind it is very real. We're actually talking about tens of hundreds of thousands of articles, peer-reviewed articles that have now been written on virtual reality in medicine. Uh, you spoke when you introduced Teri about one of the conferences, she and I have both gone to VMed to speak. VMed is in LA. It is one of the founders, is a uh GI physician from Cedar Sinai. You're talking about seven years ongoing research on he started on his um IBS patients, but has has published an entire book on VR and medicine. So we're talking to you today is specifically about hospice palliative and pain. But beyond that, virtual reality is being studied at every level of medicine. And the conferences that are going on are robust. And frankly, America's even a little behind the curve because what I saw in Europe, where it's not fee-for-service medicine, is just gangbusters research. In fact, the physician who I visited in Barcelona as a government-funded, he is a physician, a physician with a full-time position just practicing with VR. So he is overseeing these 14 sites in Barcelona dedicated to cognitive therapy and pain and palliative medicine and virtual reality. He's not even seeing patients individually anymore. So the research is there. Um, Terry and I did our own as well. We wanted an opportunity to take patients in the Southeast, go through an institutional review board, and do our own. I told her again and again because she wasn't in the healthcare realm at the time. I think the best way to start all this, Teri, we've done the pilot project with the students in VR for good. And we we've seen the interest, the PR, all that, but let's be credible. And the way to be credible in medicine is good research. So we utilized um my palliative clinic, outpatient clinic, um, with the partner hospital that I work with, and we did this work for over a year, and we had um over a 90% success rate with the ability to um to um negate pain, to bring folks um down on pain medications, not with specificity with dosing, but rather just in general treating the pain. One neuropathic patient who could get zero relief after several months of us trying a myriad of drugs, only, only received relief from VR. We actually ended up giving her Terry, did all this intervention and gave her the headset. Her, I think the person who was most um grateful was her husband to Teri for actually bringing her relief at her end of life when she started in palliative care and eventually advanced to hospice. So we we saw that pain and we saw the data behind it. Um more is now being done in that kind of research. Um, I am trying right now to join a trial over in Spain, which was a big reason I want to go talk with um this physician, um, because they're using it not only with the headsets, but you know, you think about maybe dementia patients or um patients who just feel claustrophobic with the headsets on, they're they're doing immersive rooms so that the VR is actually projected onto the wall and don't even have to wear the headset. So they've advanced

past that concern. Um, but the thing that Teri and I found in our research that I feel we have to mention is the piece that we didn't expect. And that's always the best part of research when you do your hypothesis and you're sure of what you're gonna find or you're hoping what you're gonna find. And then you find this thing that you didn't think of at all. And that was the component of spirituality. That was that we had really more patients vote, we had to ask them where their pain was on the pain scale. And we did do that before and after. We used that um measuring tool. But what they would vocalize without being asked is the meaning, the purpose, and the spirituality that they found through the content that Teri was feeding them, especially in the radiance, the luminous light that she was able um to put them in front of, that they were not having anxiety over their death or over the chronicity of their disease, that they all of a sudden were, like she said earlier, and and those were even non-patients, were um not afraid to die anymore, that they saw their purpose in the world. It was the most amazing spiritual experience, again, um, despite the personal beliefs of the patients. So the research is absolutely there, and and certainly as a part of this podcast, beyond linking you with the book, we can link Terry is an encyclopedia of of um the wealth of of research that's available um to folks and and ongoing on virtual reality and healthcare.

Chris Comeaux 7:44

Terry, what would you add?

Helping Clinicians And Families Cope

Teri Yarbrow 7:46

Well, I want to just mention um the American Medical Extended Reality Association, okay? That's the AMXRA. I'm a founding member, I believe Kathleen is too. And this is an organization like the AMA, um, which is it's it's set up for standards. It's set up to provide research. We have a journal of extended reality. Um, and there's so much research that has gone prior that this is why the FGA is given a designation for medical extended reality. So we're we're in a way, we're not no longer talking about the viability of it because it's already been proven. It's been proven in in hospitals around across America. Um one of the starter uh hospitals is um um Lucille Packard Children's Hospital out of Stanford. Every child who's admitted there is given a VR headset. So they're able to do a lot of a lot of procedures without having to anesthetize a kid. And I'm I'm not talking about surgery. I mean like um getting a child ready for surgery, you could put them in a VR headset and they'd be playing a game, they wouldn't even know that they were getting ready for surgery, right? Because it's let's face it, it's a form of distraction therapy. A lot of suturing happens, there's less need for medication, there's less need for anesthesia, or the levels are brought down. So Stanford has really been like at the forefront. Um, there's a hospital

in Tel Aviv. Um, it's called Tel HaShomer . It's almost like a whole city hospital that's devoted to VR therapy. And the reason I know about this is my teaching assistant at SCAD, she had MS. I didn't know she had MS. She had she woke up one day and the whole side of her body was paralyzed, and she went to Tel HaShomer hospital, and they gave her VR therapy, and they taught her to walk and to feed herself, and it's amazing how much work is being done. And it's not just pain. Um, a lot of the work that's going on in Barcelona that Kathleen was mentioning is is about um physical rehab. And in fact, the physical rehab section of um VR therapy is the first that it's gotten its FDA designation. So you have a lot of companies that are FDA approved. They have um a series of exercises and experiences and the way of tracking it. Um, and it's all it's all a write-off. I mean, it's all it's all an insurance build back. So yeah.

Chris Comeaux 10:35

Um now I'm just thinking like I should have done this podcast way sooner. I'm so glad we're doing this because I mean, when I'm learning, that's when I know this is solid gold. Well, the other thing that bumped into in your book that I'm like, I hadn't even thought about that either, that not only helping patients, but also caregivers and clinicians. So can you guys speak to that? How can immersive experiences helping people that are working in our space, you know, burnout, emotional fatigue, those are things that have always been an issue in our space, but feel like it's reaching certainly a crisis or epidemic level throughout healthcare, much less just an end-of-life care?

Kathleen Benton 11:11

Um, he he did a study on that. So, um, on burnout and health care workers. And the reason it came up is because when I was looking into this projector device, so I would have this uh in place for my potential PACE patients in cognitive therapy, he made the point buy the smaller projector so you can move it around because you can actually load content specific to burnout and healthcare workers and use it in your respite staff room. And of course, we all have break rooms. Um, so the meditative therapy in VR has already shown its worth in that space directly. So that's the piece of I would say um direct um direct research in burnout. But the indirect piece is that this VR tool, I what I see in my nurses or social workers or chaplains who bring it into the practice is that it works like a partner tool in their own therapy. So for example, they're there um assessing and documenting and doing all the regimen and things we're all involved in on the day-to-day and the bedside. And then they get to offer the patient or the caregiver something that really lifts them up. Number one, it just is a it's a feel-good situation for them. Number two, when they're immersed, and and especially as it becomes habitual, maybe not the first or the second time, but if it's a regular therapy, they're documenting while

their um their patient is enjoying an intervention. So there's really multifaceted purpose for using this as a tool for a clinician, both directly and indirectly in patient use.

Legacy Storytelling With Reminiscence VR

Teri Yarbrow 13:14

Well, a lot of times bringing VR to a hospice patient, if they're if they're actively dying and their eyes are closed, you know, they're not a candidate for VR. However, the room is full of family members, some of them are just grieving and are inconsolable. Sometimes they have their children with them. So walking into a hospice session like that and letting each member of the family try VR, it's it's amazing. It's transformational. Um and when I use the word transformation, there's a term that that's been coined about awe-inducing awe, and that's STEs or self-transcendent experiences, which is what awe can do. A little bit of awe, you can transform somebody's experience about their mortality, but you can also help. I mean, the reason that that virtual reality studies are saying that it's Cyberdelic or Technodelic is that it it's it's expanding a kind of it's how do I say this? It's it's expanding this boundary, you know, there's the ego, and and that ego is so afraid of dying and letting go, right? But if they could have a little taste that they're not so separate from the universe or God or whatever you want to call it, this is this is like the beginning of a maybe healing that that final wound. I I'm dying of cancer, why me? You know, why at this time of my life do I have this? And a self-transcendent experience can really change that end-of-life experience. So, and if we can't get to the patient, you know, before they're doing the act of dying, we can certainly help their family members cope a little bit better. And I think that that's what, you know, a little bit of awe can do for our um, yeah, walking into a room like that.

Chris Comeaux 15:11

This might be a segue question, but hospice has always been about honoring someone's story. And you alluded to this earlier. But how might immersive storytelling through VR allow patients to reconnect with their life story or their legacy? I feel like you kind of took it in a way there, Terry, but I feel like there might be another angle here that you're alluding to earlier related to people's legacy or life story. Or is that another maybe frontier of as you think of how this goes forward?

Teri Yarbrow 15:40

There are a number of um groups that are working with VR legacy stories and storytelling. Um, one company can take um a patient using Google Maps through a journey back to the significant places of their past. They can go to the church where they got married, they can go to the school uh where they met their husband, they can go to the home that

they were raised in. So some of that is really in it's called um reminiscence therapy. So that is very powerful for unlocking memory for Alzheimer's patients, dementia patients, but but also music is as well. Um as far as uh creating uh storytelling for patients, when I was doing um hospice um volunteer work when I first met Kathleen, I was doing work of um get t doing end-of-life videos for patients where a patient would communicate some final wishes, and maybe the video wasn't shown to the family until after they were um um transitioned. So that might have, you know, a lot of potential using a a a VR camera, a 360 camera, so that you could get put somebody into the into the scenario of really sitting with somebody that's starting to impart um jewels of their life, you know, what what they've been through.

Chris Comeaux 17:16

That's amazing. It's just the possibilities as my mind gets thinking about this. I'm so glad you said that too, Teri. There's someone else I want to connect you guys with. So if we look forward 10 to 15 years, do you think that VR is going to become a normal part? Or is this still gonna be kind of a niche innovation? What what do you guys see?

Making VR Standard In Care

Lighter Devices And AR Glasses

Kathleen Benton 17:37

I mean, if we have anything to do with it, it will become a normal part. Because, you know, I I tell a lot of hospices because um we we try to advocate both of us. Teri was really doing the work and working with them. And me, I I just met with one out of Oklahoma, um I don't know, last Friday, I think it was, just to say, this is not rocket science. You, you know, anyone can learn this. They need to be trained on how to do it, they need to use the right content and not just get off the internet what's there. And they need to have the right prompts for the patient. Beyond that, the the grants available for this technology are abundant. And any of us in the nonprofit world, I can tell you, donors are thrilled to fund something that's unique. So starting a first program, it I mean, you should just dive in. That's how I do everything, but at least in this one incident, you should take my advice and just dive in. Um, because even if you house it in your volunteer department and have three interested volunteers that train on it alongside your volunteer coordinator or manager, that's a great start at a \$5,000 effort. It could be a \$5,000 effort. Um I think it will become utilized everywhere because I see the use right now in the aging population growing. We've got to find interventions for our demented population as the baby boomers just take over. Um, and of course, with the baby boomer takeover will come more and more dementia. We've got to find therapies that work with the brain in a

different way. And I see what's happening in Europe. And over there, they aren't just using it for pain and palliative and healing, they're using it for cognitive therapy towards better executive function as dementia progresses. So you're talking about even through dementia worsening, a patient's functionality heightening because of virtual reality therapy. So, you know, if we don't get behind it because it's beautiful and the right thing to do, I think we'll get behind it as caregivers because we've got to find something to help these folks be more independent for longer in what could be an 11-year illness.

Teri Yarbrow 20:23

I'll add that I think that the BR headsets will really radically transform. Um, you know, a lot of our elderly patients, you know, their faces are so fragile and putting on this big mask. A lot of them don't don't want anything on their face that that's that's that heavy. And I think that that's where this big push right now with Apple and Meta and Samsung and all the manufacturers are really going towards um AI glasses or AR glasses, you know, really trying to find something that's lightweight that sits on your face. My feeling is the difference between um AR and VR is the immersive quality. So you you really need something that's gonna have at least 180, but that could be so much more um lightweight. And I I really think, you know, in the next five to ten years, we're gonna see um the headsets go away. Um we're gonna have lightweight glasses. I think we'll also have contact lenses, retinal implants. These implants will probably have content. Um, you know, I mean, I could I could talk about brain computer interfaces, but I mean I think that there's leaps and bounds in this area. So the VR headset is like a dinosaur, you know? It is. It's this clunky thing that you put on your head, but it's magic. And um I think that the race is on right now to find a more comfortable device for our patients.

Chris Comeaux 21:55

You you've both alluded to this throughout, but is there going to be like a library of content that perhaps programs like ours will subscribe to? Is that where we're headed? Because you said, you know, I'm sure there's free stuff you could download, but I'm like getting, and maybe this is the categories you're alluding to, Teri, but there's there's recreational things, there's transcendent content. Um, it feels like there's these kind of flavors of different content. So is that where we're headed as like a library? And is that something you guys are working on?

Teri Yarbrow 22:25

Well, um, this is all this always comes up at these VR conferences, and that is it would be great to have a VR pharmacy where you know content is shared and a doctor can say, I want you to go, you know, uh kayaking in Iceland for half an hour, and then if you know, if you still feel a lot of pain, then you can take your, you know, your Oxy. Hopefully that's

not the drug of choice in the future. But um, so yeah, VR pharmacy would be phenomenal if people could share content.

Chris Comeaux 22:56

That's incredible. Well, ladies, my mind is blown, which is a great sign of a great podcast. I'd love to give both of you the opportunity, final thoughts that you have.

Teri Yarbrow 23:04

I love that um Europe is so pro um so advanced, so pro um using the power of the brain, you know, incorporating that into medicine. Um, I think that having our health care system, you know, really caught up in um fee-based and and all the bureaucracy. I mean, uh where we're really pushing for humanity to put to put the human back into the experience, to put the patient back in the experience. VR is kind of a, you know, it it it's it's kind of a a device. That's all it is. You know, the magic is really in the intent, the magic is in um who's who's doing the therapy. Right. And I don't know. I mean, I'm excited about the future because I think I think that there's a lot of people that are aligned with this kind of work. Um and and maybe for the moment it's not uh widespread or it's niche, but I don't think it's gonna stay that way.

Kathleen Benton 24:10

I would just say that healthcare is hard and I don't think it's a poised or position to get easier. I think um it's just gonna continue to be heavily regulated and scrutinized and audited, and we're gonna, as I tell my leaders, always say we're not staffed appropriately, what we always used to feel was appropriate. So finding creative, unique, powerful interventions like this is a gift, and I'm excited to be able to be excited about something new, uh a program that can be put in place easily that can really change the trajectory of an illness or the trajectory of an end of life for a patient. Um, and I just would encourage looking into it, researching it, reading a little bit about it, and reach out to one or both of us to just feel like you've got a resource in your country um that is doing this in your field and um wants great partnerships to continue to do that work.

Chris Comeaux 25:28

Wow. Well, ladies, any links you want, link to the book, Teri, if there's certain research you want us to leak folks to your contact information, anything you want, because I have a feeling this is when people are gonna really be interested in doing some good follow-up. Um I'm just sitting here and just thinking just the providence of you two coming together. Kathleen, I kind of knew the story of your brother, but to think about how you shared that part, Tari, your amazing creative superpowers and you two coming together is this great dynamic duo, bringing this into this space. I just want to high-five you both. Um, I think this is gonna be a much listened to, paid forward show, just because I think you're

plowing new territory. But as I listen to you guys, I'm like, why does someone like we had a presentation, Kathleen? You might remember maybe three years ago, NPHI, of a little bit of immersive experience, but it wasn't applying it the way you two are applying it in live care. So I just want to high-five you both and encourage you. I think this has got huge potential. And I'm so glad, Kathleen, you mentioned it as in passing, and I made a note. I'm like, she's writing a book. We need to do a podcast on that. I'm so glad that we finally got together on it.

Kathleen Benton 26:37

Yeah, he even called me out. He said, I whatever happened with your book. I said, What do you mean? I wrote it, it's done. And he said, Well, I thought you were gonna maybe tell me that I can buy it. I said, Chris, I'll just send you a copy if you really want it. But so we did, and here we are. So thanks for having some faith in us.

Subscribe Share And Closing Thanks

Chris Comeaux 26:55

Absolutely. And again, I have a copy here. We're gonna include a link for our listeners. So again, thank you both. Yep. And for our listeners, we want to thank you. At the end of each episode, we share a quote, a visual. The idea is to create a Brain Bookmark, a thought product about our podcast subject. This is gonna be a fun one to further your learning and growth and thereby your leadership. We're hoping it sticks. It's like we're looking for a brain tattoo with this brain bookmark at the end. Be sure to subscribe to the channel. This is gonna be a podcast we're gonna pay forward to your friends, your coworkers throughout the hospice and powder care space. You know, it's easy for us to rail against the world and be frustrated by things. Let's be the change that we wish to see in the world, just like Kathleen and Teri coming together. So thanks for listening to our podcast. And here's our Brain Bookmark to close today's show.

Jeff Haffner / Producer 27:39

VR gives patience back. What illness takes away. Presence, identity, and agency by Terry Yarbrow. Thank you, USI, for sponsoring this podcast.